

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: David Paul Limont et al.

Art Unit 2444

Serial No. 10/719,866

Filed: November 21, 2003

Confirmation No. 3063

For: METHOD AND COMPUTER PROGRAM PRODUCT TO PROVIDE SYNC
NOTIFICATIONS TO CLIENT DEVICES

Examiner: Umar Cheema

DECLARATION OF LIMONT ET AL. UNDER 37 C.F.R. §1.131(a)

TO THE COMMISSIONER FOR PATENTS,

SIR:

This declaration establishes completion of the invention claimed in the above-identified application in the United States before January 2, 2003, the earliest known publication date of Thomas et al (US Patent Application 2003/0004917, now US Patent No. 6,901,415, hereinafter the '415 patent) and the earliest known publication date of Thomas et al (EP Application EP 1 271 320, which claims priority from US Patent 6,952,708, hereinafter the '708 patent), collectively, "cited art".

We, David Paul Limont and Srinivasa R. Manda declare as follows:

1. We are joint inventors of the subject matter claimed in the above-identified U.S. Patent Application Serial No. 10/719,866 ("the '866 application").

2. a) I, David Paul Limont, am currently employed by Microsoft Corporation of Redmond, Washington as a Senior Program Manager Lead.

b) I, Srinivasa R. Manda, am currently employed by Microsoft Corporation of Redmond, Washington as a Principal Development Lead:

3. Exhibits A and B attached to this Declaration are submitted as evidence of conception for the invention claimed in this patent application. Exhibits A and B, both of which we prepared prior to January 2, 2003, disclose each and every element of our present invention embodied in the '866 application. Paragraphs 4-7 of this Declaration describe Exhibits A and B and their disclosure of the features of the independent claims. Paragraphs 8-10 of this Declaration specifically map the elements of each of the independent claims to the disclosure thereof in Exhibits A and B.

4. Exhibit A is a redaction of a Batching Document titled "Adding State to AUTD Sync Notifications." Inventor David Paul Limont prepared the Batching Document of Exhibit A prior to January 2, 2003. Exhibit A specifies the subject matter of our present invention embodied in the '866 application. While specific details have been blocked out, in accordance with MPEP § 715.07, the Batching Document of Exhibit A provides a complete disclosure to another person establishing that the subject matter embodied in the '866 application had been mentally comprehended. Inasmuch as we prepared the Batching Document of Exhibit A before January 2, 2003, it is evidence that we conceived of the invention prior to January 2, 2003. Thus, in accordance with MPEP § 715.07(III), we declare that the invention embodied in the '866 application was conceived prior to January 2, 2003.

5. More particularly, in the section of Exhibit A titled "Design," we disclosed each of the features included in the pending independent claims 1, 11, and 24. For example, this section teaches the use of the syncGUID (described as the 'current rtag' variable) as the basis for the notion of the device state ("Device State Correlation with RTAG" subsection). And the sub-section titled "Batching Algorithm" teaches generating notifications upon event occurrence (steps 1-3), determining the state of the device (steps 4-5), taking action based on the state and timeout elements (step 6), and updating the syncGUID upon successful sync (steps 7-8). Moreover, in the section of Exhibit A titled "Solution Overview," we disclosed maintaining a state of a mobile device.

6. Exhibit B is a redaction of a Design Specification. A group including inventors David Paul Limont and Srinivasa R. Manda prepared the Design Specification of Exhibit B prior to January 2, 2003. Exhibit B describes the software implementation of aspects of our present invention embodied in the '866 application. While specific details have been blocked out, in accordance with MPEP § 715.07, the Design Specification of Exhibit B provides a complete disclosure to another person establishing that the subject matter embodied in the '866 application had been mentally comprehended. Inasmuch as we prepared the Design Specification of Exhibit B before January 2, 2003, it is evidence that we conceived of the invention prior to January 2, 2003. Thus, in accordance with MPEP § 715.07(III), we declare that the invention embodied in the '866 application was conceived prior to January 2, 2003.

7. More particularly, in Section 4.1.1 "AUTD Notification Schema" of Exhibit B, we disclosed features included in the pending independent claims 1, 11, and 24. For example, this section teaches a notification schema used for sending a notification to the Always-Up-To-Date (AUTD) device in an SMS message, and that the main content of the notification is the SyncGUID.

8. Exhibits A and B disclose each and every element of the method recited by independent claim 1, at least as follows (note that Exhibit A describes the TrackingGUID as "<rtag>" and the syncGUID as "current rtag"):

A method to provide a sync notification to a client device comprising the steps of:	
receiving notification that an event of interest has been received;	<ul style="list-style-type: none"> Exhibit A, Section "Design", Steps 1-3 of 'Batching Algorithm'.
in response to receiving the notification, determining a state of the client device, said state indicating whether or not the client device has outstanding sync notifications, said state being determined based on a trackingGUID and a syncGUID;	<ul style="list-style-type: none"> Exhibit A, Section "Design", Steps 4-6 of 'Batching Algorithm'. Exhibit B, Section 4.1.1, where the notification has syncGUID information.

<p>if the state of the client device indicates that the client device has no outstanding sync notifications prior to the receipt the received notification:</p> <p style="padding-left: 40px;">setting trackingGUID equal to the syncGUID, wherein the syncGUID is updated after each successful device synchronization of the client device;</p> <p style="padding-left: 40px;">setting a timeout equal to a current time plus a predetermined value and sending the sync notification to the client device;</p>	<ul style="list-style-type: none"> Exhibit A, Section "Design", pseudo code of the 'Batching Algorithm': <p style="padding-left: 40px;">If (<rtag> != current rtag) Set <rtag> to current rtag; Set timeout to time + X minutes; Send notification;</p> <ul style="list-style-type: none"> Exhibit A, Section "Design", Step 8 of 'Batching Algorithm':
<p>if the state of the client device indicates that the client device has at least one outstanding sync notification:</p> <p style="padding-left: 40px;">not sending the sync notification to the client device if the current time is less than the timeout, said timeout being used to determine the maximum time between sync notifications; and sending the sync notification to the client device if the current time is greater than the timeout.</p>	<ul style="list-style-type: none"> Exhibit A, Section "Design", pseudo code of the 'Batching Algorithm': <p style="padding-left: 80px;">Else If (<rtag> == current rtag && CurrentTime > timeout) Set timeout to time + X minutes; Send notification;</p> <p style="padding-left: 80px;">Else Do Nothing</p>

9. Exhibits A and B disclose each and every element of the method recited by independent claim 11, at least as follows (note that Exhibit A describes the TrackingGUID as "<rtag>" and the syncGUID as "current rtag"):

<p>At least one computer readable storage medium having computer executable instructions for providing a sync notification to a client device, the computer executable instructions performing the steps of:</p>	
<p>receiving notification that an event of interest has been received;</p>	<p>Exhibit A, Section "Design", Steps 1-3 of 'Batching Algorithm'.</p>

in response to receiving the notification, determining a state of the client device, said state indicating whether or not the device has outstanding sync notifications prior to the receipt the received notification, said state being determined based on a trackingGUID and a syncGUID;	<p>Exhibit A, Section "Design", Steps 4-6 of 'Batching Algorithm'.</p> <p>Exhibit A, Section "Design", pseudo code of the 'Batching Algorithm':</p> <p style="padding-left: 40px;">If (<rtag> != current rtag)</p> <p>Exhibit B, Section 4.1.1, where the notification has syncGUID information.</p>
determining if a current time is less than a timeout set based on the confidence level of the network wherein the timeout indicates how long to wait to retry sending the notification to the device;	<p>Exhibit A, Section "Design", pseudo code of the 'Batching Algorithm':</p> <p style="padding-left: 40px;">Else If (<rtag> == current rtag && CurrentTime > timeout)</p>
sending the sync notification to the client device if the state of the client device indicates that the client device has at least one outstanding sync notifications prior to the receipt the received notification and the current time is not less than a timeout; and	<p>Exhibit A, Section "Design", pseudo code of the 'Batching Algorithm':</p> <p style="padding-left: 40px;">Else If (<rtag> == current rtag && CurrentTime > timeout)</p> <p style="padding-left: 80px;">Set timeout to time + X minutes;</p> <p style="padding-left: 80px;">Send notification;</p>
not sending the sync notification to the client device if the state of the client device indicates that the client device has at least one outstanding sync notification prior to the receipt the received notification and the current time is less than a timeout.	<p>Exhibit A, Section "Design", pseudo code of the 'Batching Algorithm':</p> <p style="padding-left: 40px;">Else</p> <p style="padding-left: 80px;">Do Nothing</p>

10. Exhibits A and B disclose each and every element of the method recited by independent claim 24, at least as follows (note that Exhibit A describes the TrackingGUID as "<rtag>" and the syncGUID as "current rtag"):

A method to provide a sync notification to a client device comprising the steps of:

receiving a notification that an event of interest has occurred;	Exhibit A, Section "Description of the Invention", Steps 1-3 of 'Batching Algorithm'.
in response to the notification, retrieving a device/configuration file of the client device, said device/configuration file including a syncGUID and a trackingGUID, said syncGUID being updated after each successful device synchronization of the client device for indicating a state of the client device, and said trackingGUID being set to equal the last known syncGUID for the client device;	Exhibit A, Section "Description of the Invention", Steps 4-8 of 'Batching Algorithm'. Exhibit B, Section 4.1.1, where the notification has syncGUID information.
determining the state of the client device prior to receipt of the received notification based on the trackingGUID, wherein the client device is in an up-to-date state when the trackingGUID does not equal the syncGUID indicating the client device has performed a sync since a previous notification was processed and wherein the client device is in a pending synchronization state when the trackingGUID equals the syncGUID indicating the client device has not performed a sync since the previous notification was processed;	Exhibit A, Section "Description of the Invention", pseudo code of the 'Batching Algorithm': <pre> If (<rtag> != current rtag) Set <rtag> to current rtag; Set timeout to time + X minutes; Send notification; Else If (<rtag> == current rtag && CurrentTime > timeout) Set timeout to time + X minutes; Send notification; Else Do Nothing </pre>
sending the sync notification to the client device and re-setting the trackingGUID to equal the syncGUID when the determined state of the client device prior to the receipt of the received notification is the up-to-date state;	Exhibit A, Section "Description of the Invention", pseudo code of the 'Batching Algorithm': <pre> If (<rtag> != current rtag) Set <rtag> to current rtag; Set timeout to time + X minutes; Send notification; </pre>
not sending the sync notification to the client device when the determined state of the client device prior to the receipt of the received notification is the pending synchronization state.	Else Do Nothing

11. Exhibit C attached to this Declaration is submitted as evidence of our reasonable diligence towards reduction to practice of the invention embodied in the '866 application. Exhibit C is a copy of an email from inventor David Paul Limont sending the Batching Document of Exhibit A to the testing group for testing code developed towards reducing the invention to practice. We note that one of the email recipients is designated as a Tester in the Design Specification of Exhibit B. The email of Exhibit C and the Batching Document of Exhibit A were sent prior to January 2, 2003 on October 1, 2002, which shows that the subject matter embodied in the present application had been reduced to code and was under testing. While specific details have been blocked out, in accordance with MPEP § 715.07, the email of Exhibit C is evidence of our reasonable diligence towards reduction to practice prior to January 2, 2003.

12. Exhibit D attached to this Declaration is submitted as further evidence of our reasonable diligence in preparing and filing the '866 application. Exhibit D is a Patent Pre-disclosure Document that we prepared to initiate the patent application process. We initially prepared the Patent Pre-disclosure Document of Exhibit D prior to January 2, 2003. The later date of August 14, 2003 shown in Exhibit D indicates when the document was opened and saved by legal counsel. The Patent Pre-disclosure Document of Exhibit D provides a complete disclosure to legal counsel of the subject matter embodied in the '866 application. While specific details have been blocked out, in accordance with MPEP § 715.07, the Patent Pre-disclosure Document of Exhibit D is evidence of our reasonable diligence in preparing and filing the '866 patent application.

13. More particularly, Exhibit D closely describes the batching algorithm specified in Exhibit A, with the "<rtag>" and "current rtag" variables replaced by "trackingGUID" and "syncGUID," respectively, consistent with the '866 application. In the section of Exhibit D titled "Description of the invention," we disclosed each of the features included in the pending independent claims 1, 11, and 24. For example, this section teaches maintaining a state of the mobile device ("High Level" subsection). This section also teaches the use of the syncGUID as the basis for the notion of the device state ("Device State" subsection). And the sub-section titled "Batching Algorithm"

teaches generating notifications upon event occurrence (steps 1-3), determining the state of the device (step 4), taking action based on the state and timeout elements (step 5), and updating the syncGUID upon successful sync (steps 6-7).

14. Exhibit E attached to this Declaration is submitted as further evidence of our reasonable diligence in preparing and filing the '866 application. Exhibit E is a copy of an email from inventor Srinivasa R. Manda to legal counsel detailing a previous discussion regarding the Patent Pre-disclosure Document of Exhibit D. Inventor Srinivasa R. Manda sent the email to legal counsel on October 20, 2003.

15. Exhibit F provides further evidence of diligence in preparing and filing the '866 application. Exhibit F is a copy of an email dated October 27, 2003 from legal counsel to the inventors requesting additional detail on an aspect of the invention.

16. Exhibit G attached to this Declaration is submitted as further evidence of our reasonable diligence in preparing and filing the '866 application. Exhibit G is a copy of an email from legal counsel to inventors David Paul Limont and Srinivasa R. Manda sending a final draft for the '866 application. Legal counsel sent the email on November 10, 2003 and filed the '866 application on our behalf on November 21, 2003.

17. All acts referred to herein occurred in the United States.

18. Based on the foregoing, we believe that we are the original inventors of the invention claimed in this patent application.

19. Based on the foregoing, we believe that we conceived the claimed invention in the United States before the earliest publication date of the cited art.

20. Based on the foregoing, we believe that we were reasonably diligent from before January 2, 2003 to actual reduction to practice and to the filing of the '866 application, which constitutes a constructive reduction to practice.

21. Based on the foregoing, we believe that outside legal counsel was reasonably diligent in preparing and filing the '866 patent application.

22. We each declare that all statements made herein of our knowledge are true; and further that these statements were made with the knowledge that willfully making false statements is punishable by fine, imprisonment, or both, under 18 U.S.C. '1001 and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

9-9-2009

Date

Paul Limont

David Paul Limont

08-27-2009

Date

M.S. Reddy

Srinivasa R. Manda

